

WEATHER IN PAKISTAN (April - June 2003)

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Introduction:

During the hot weather season, significant westerly low pressure waves passed across the country. Three strong weather systems influenced the Northern parts of the country during middle and towards the end period of April. Two other significant weather spells occurred during first four days of May and last five days of June. Under their influence heavy to very heavy rains and few dust storms in plains occurred at a number of places in Northern parts of the country. An easterly low which was formed over Kutch (India) and adjoining lower Sindh caused rainfall in Southern parts of Sindh on 18 & 19 June. A number of dust storms also hit the plain areas of the country during May & June. Severe heat wave/heat wave conditions prevailed over some parts in plains of Northeast Balochistan and Southern parts of Sindh for few days during the month of April and on a number of days in plains of the Punjab, Northeast Balochistan and Sindh during May and June. Sibbi recorded 52.6° C on 5 June 2003 which is the highest maximum temperature ever recorded in Pakistan since 1931.

Seasonal rainfall (mm) (April-June)

Seasonal rainfall out of 56 meteorological observing stations in the whole country was in large excess in 10, moderate excess in 6, slight excess in 3, normal in 6, slight deficit in 6, moderate deficit in 8 and in large deficit in 17. (Definition shown in Appendix 1). Rainfall was in large excess in Gupis, Gilgit, Skardu, Bunji, Chilas, Saidu Sharif, Peshawar, Barkhan, Pasni and Karachi (Air port), moderate excess in Astor, Kohat, Lahore (Air port), Bahawalpur, Khanpur and Badin, slight excess in Muzaffarabad, Kakul and Balakot, normal in Garhi-Dupatta, Chitral, Dir, Drosh, Risalpur and Quetta, slight deficit in Kotli, Cherat, Jhelum, Shorekot, Lahore (PBO) and Bahawalnagar, moderate deficit in Parachinar, Chaklala, Murree, Sialkot, Mianwali, Sargodha, Sibbi and Hyderabad and in large deficit in D.I.Khan, Faisalabad, Multan, Dalbandin, Nokkundi, Zhob, Kalat, Khuzdar, Panjgur, Jiwani, Moenjodaro, Jacobabad, Rohri, Nawabshah, Padidan, Chhor and Karachi(Masroor). The principal amounts of rainfall during the month of April, May and June 2003 are given in Table-5. Seasonal station-wise percentage rainfall departures are given in Fig. 1 and percentage departures in Table 1. Whereas province-wise graphic representation of rainfall is given in Fig. 2.

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Monthly Features:

1. April

a. Weather and associated synoptic features:

Details of weather systems formed during the month are given in Table 2. Rain/thundershowers occurred almost at a number of places on 7–11 days in Malakand, Hazara and Kohat divisions, on 3–5 days in FATA, Peshawar, Rawalpindi and Gujranwala divisions, on 1–2 days in Bannu, D.I.Khan, Sargodha, D.G.Khan, Zhob, Kalat and Mekran divisions. Rain/thunderstorms also occurred at a few places on 6–8 days in Rawalpindi, Gujranwala and Sargodha divisions, on 1–4 days in FATA, Malakand, Hazara, Bannu, Kohat, Peshawar, D.I.Khan, Faisalabad, Lahore, Multan, D.G.Khan, Bahawalpur, Quetta, Zhob and Mekran divisions.

b. Rainfall in (mm) distribution:

The rainfall was in large excess in 5 meteorological observing stations (Gupis, Skardu, Kohat, Peshawar and Pasni); moderate excess in 3 meteorological observing stations (Astor, Saidu Sharif and Risalpur); slight excess in 4 meteorological observing stations (Chilas, Muzaffarabad, Dir and Khuzdar); normal in 10 meteorological observing stations (Gilgit, Bunji, Garhi Dupatta, Parachinar, Chitral, Drosh, Kakul, Balakot, Cherat and Murree); slight deficit in 1 meteorological observing station (Kotli); moderate deficit in 3 meteorological observing stations (D.I.Khan, Sialkot and Mianwali); and in large deficit in 30 Meteorological observing stations (Chaklala, Jhelum, Sargodha, Faisalabad, Shorekot, Khanpur, Quetta, Dalbandin, Nokkundi, Zhob, Barkhan, Sibbi, Kalat, Panjgur, Jiwani, Moenjodaro, Jacobabad, Rohri, Nawabshah, Padidan, Hyderabad Badin, Chhor, Karachi (air port) and Karachi (Masroor). The principal amounts of rainfall during the month are given in Table-5.

Table 1: Station wise rainfall (mm) for each month and season as a whole (April-June, 2003)

S.No	Name of station	April			May			June			Season		
		Actual	Normal	Dep %	Actual	Normal	Dep%	Actual	Normal	Dep%	Actual	Normal	Dep%
		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
1	Gupis	70	20	250	99	24	313	37	8	363	206	52	296
2	Gilgit	23	23	0	87	25	248	7	6	17	117	54	117
3	Skardu	40	26	54	101	26	288	3	9	-67	144	61	136
4	Bunji	26	29	-10	118	29	307	9	7	29	153	65	135
5	Chilas	39	32	22	122	28	336	5	8	-37	166	68	144
6	Astor	111	87	27	124	71	75	15	20	-25	250	178	40
7	Muzaffarabad	124	111	12	134	79	70	99	103	-4	357	293	22
8	Garhi Dupatta	154	141	9	92	96	-4	87	114	-24	333	351	-5
9	Kotli	70	81	-13	29	54	-46	79	82	-4	178	217	-18
10	Parachinar	86	92	-7	15	63	-76	19	41	-54	120	196	-39
11	Chitral	92	89	3	42	45	-7	9	5	80	143	139	-3
12	Dir	192	168	14	78	88	-11	28	51	-45	298	307	-3
13	Drosh	114	116	-2	75	68	10	23	14	64	212	198	7
14	Saidu Sharif	135	100	35	73	65	12	106	41	159	314	206	52
15	Kakul	119	112	6	90	82	10	121	85	42	330	279	18
16	Balakot	147	134	10	90	77	17	135	98	38	372	309	20

17	Kohat	85	56	52	13	35	-63	55	20	175	153	111	38
18	Peshawar	129	49	163	23	27	-15	10	8	25	162	84	93
19	Risalpur	67	47	43	20	26	-23	6	18	-67	93	91	2
20	Cherat	67	71	-6	28	35	-20	3	18	-83	98	124	-21
21	D.I.Khan	14	22	-36	2	17	-88	0	14	-100	16	53	-70
22	Chaklala	19	62	-69	15	39	-61	63	62	2	97	163	-40
23	Murree	120	133	-10	34	92	-63	100	130	-23	254	355	-28
24	Jhelum	15	37	-59	8	32	-75	82	52	58	105	121	-13
25	Sialkot	19	31	-39	7	28	-75	65	70	-7	91	129	-29
26	Mianwali	22	30	-27	18	22	-18	17	25	-32	57	77	-26
27	Sargodha	2	29	-93	23	21	9	18	23	-22	43	73	-41
28	Faisalabad	2	17	-88	3	16	-81	10	28	-64	15	61	-75
29	Shorekot	0	9	-100	1	11	-91	32	23	39	33	43	-23
30	Lahore (P.B.O)	2	20	-90	18	22	-18	41	36	14	61	78	-22
31	Lahore (A/P)	3	19	-84	26	24	8	72	33	118	101	76	33
32	Multan	3	13	-77	0	10	-100	0	12	-100	3	35	-91
33	Bahawalpur	1	7	-86	5	6	-17	37	17	118	43	30	43
34	Bahawalnagar	1	9	-89	0	4	-100	20	15	33	21	28	-25
35	Khanpur	0	3	-100	1	5	-80	13	3	333	14	11	27
36	Quetta	3	28	-89	30	6	400	0	1	-100	33	35	-6
37	Dalbandin	0	8	-100	0	2	-100	0	1	-100	0	11	-100
38	Nokkundi	0	4	-100	0	0	0	0	0	0	0	4	-100
39	Zhob	12	30	-60	0	15	-100	1	11	-91	13	56	-77

40	Barkhan	7	29	-76	37	17	118	89	31	187	133	77	73
41	Sibbi	0	15	-100	11	2	450	2	6	-67	13	23	-43
42	Kalat	0	7	-100	0	2	-100	0	1	-100	0	10	-100
43	Khuzdar	13	11	18	3	14	-79	0	12	-100	16	37	-57
44	Panigur	0	7	-100	0	3	-100	0	3	-100	0	13	-100
45	Pasni	22	4	450	0	0	0	0	0	0	22	4	450
46	Jiwani	0	6	-100	0	0	0	0	1	-100	0	7	-100
47	Moenjodaro	0	1	-100	0	0	0	0	0	0	0	1	-100
48	Jacobabad	0	2	-100	0	2	-100	0	5	-100	0	9	-100
49	Rohri	0	1	-100	0	4	-100	0	4	-100	0	9	-100
50	Nawabshah	0	3	-100	0	1	-100	2	8	-75	2	12	-83
51	Padidan	0	2	-100	0	1	-100	0	3	-100	0	6	-100
52	Hyderabad	0	6	-100	0	3	-100	13	14	-7	13	23	-43
53	Badin	0	3	-100	0	1	-100	21	11	91	21	15	40
54	Chhor	0	3	-100	0	3	-100	1	20	-95	1	26	-96
55	Karachi (A/P)	0	4	-100	0	0	0	16	5	220	16	9	78
56	Karachi (Masroor)	0	5	-100	0	0	0	02	4	-50	2	9	-78

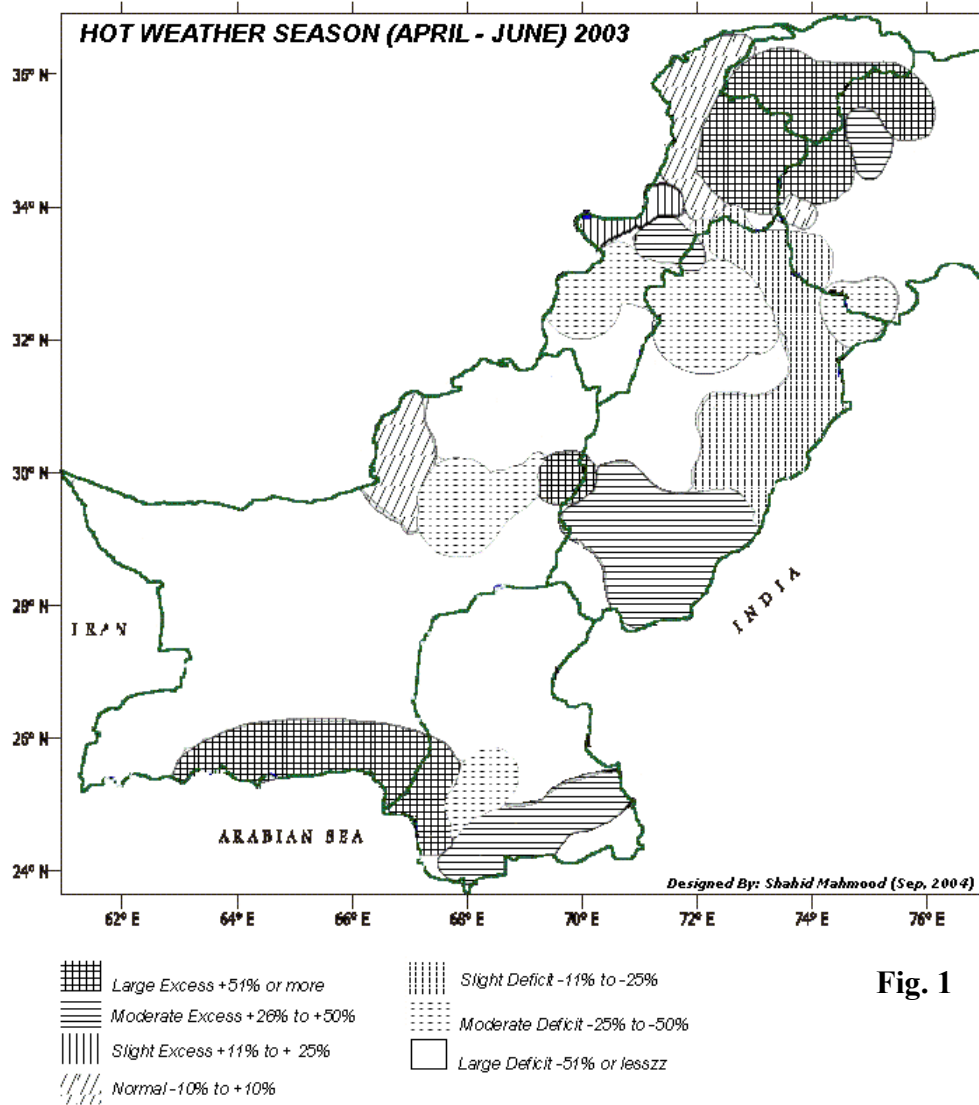


Fig. 1

Table 2:
Detail of weather systems during April 2003

S.No	System	Period	Place of the first location	Direction of Movement	Place of final location	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Low pressure	1-2	Southeast Sindh and adjoining areas	Stationary	Southeast Sindh and adj. areas	Became less-marked on 3
2	Do	8-9	South Punjab and adj. areas	North/North-Eastwards	North Punjab	Became less marked on 10
3	Do	10-13	Balochistan	Northwards	North Balochistan	Became less-marked on 14
4	Do	18-20	Upper North West Frontier Province and adjoining areas	Eastwards	Kashmir and adj. areas	Moved away Eastwards on 21
5	Low pressure associated with a trough upto mid-tropospheric level	1-3	Southeast Iran and adjoining areas	Eastwards	South Punjab and adjoining areas	Moved away East/Northeastwards on 4
6	Do	14-16	Do	Do	Balochistan	Became less-marked on 17
7	Do	23-28	Balochistan and adjoining areas	Northeastwards	Kashmir and adjoining areas	Moved away Northeastwards on 29

c. Temperature Distribution:

Severe heat wave conditions prevailed on 1 day in Sibbi division. Heat wave conditions prevailed on 10 days in Sibbi division, on 5 days each in Hyderabad and Mirpurkhas divisions. Hot day conditions prevailed on 1–2 days in Lahore, Faisalabad, Multan, Quetta, Sukkur and Karachi divisions, on 1–2 days in FATA, Zhob, Sibbi and Mekran divisions. They were appreciably to markedly above normal on 11–13 days in Sukkur, Mekran and Karachi divisions, on 8–10 days in Peshawar, Rawalpindi, Faisalabad, Bahawalpur, Zhob and Quetta divisions, on 4–6 days in FATA, Malakand, Hazara, Lahore, Gujranwala, Multan and Larkana divisions. They were appreciably to markedly below normal on 3–5 days in Malakand, Hazara, FATA, Peshawar, Rawalpindi, Lahore, Bahawalpur and Hyderabad divisions, on 1–2 days in Gujranwala, Faisalabad, Zhob, Quetta, Sibbi, Mekran and Karachi divisions. They were considerably below normal on 1 day in Malakand division. During the month, the highest maximum temperature in plains of

the country was 48.5° C recorded at Nawabshah (Sukkur division) on 30 April 2003.

Night temperatures were appreciably to markedly below normal on 13 days in Rawalpindi division, on 3 – 5 days in FATA, Hazara, Peshawar, Faisalabad, Bahawalpur, Gujranwala, Sibbi and Sukkur divisions, on 1 – 2 days in Multan and Mirpurkhas divisions. They were appreciably to markedly above normal on 18 days in Lahore division, on 11 – 14 days in Mekran and Sukkur divisions, on 4 – 7 days in Rawalpindi, Faisalabad, Multan, Bahawalpur, Sibbi, Larkana, Mirpurkhas and Hyderabad divisions, on 1 – 3 day in Peshawar, Gujranwala, Quetta and Karachi divisions. During the month, the lowest minimum temperature in plains of the country was 9.0° C recorded at Islamabad (Rawalpindi division) on 5 April 2003.

d. Disastrous weather events and associated damages:

No such major report appeared in the national press during this month.

2. May:

a. Weather and associated synoptic features:-

Details of weather systems formed during the month are given in Table 3. Rain/thundershowers with a few dust storms in plains occurred almost at all the places on 7–10 days in Malakand and Hazara divisions, on 1–3 days in FATA, Bannu, Kohat, Peshawar, Rawalpindi, Gujranwala, Sargodha, Lahore, Zhob and Sibbi divisions. Rain/thunderstorms with duststorms in plains also occurred at a few places on 5–8 days in FATA, Malakand, Rawalpindi and Kalat divisions, on 1–3 days in Hazara, Kohat, Peshawar, D.I.Khan, Gujranwala, Faisalabad, D.G.Khan, Bahawalpur, Quetta, Zhob, Sibbi and Mekran divisions.

b. Rainfall (mm) distribution:

The rainfall was in large excess in 10 meteorological observing stations (Gupis, Gilgit, Skardu, Bunji, Chilas, Astor, Muzaffarabad, Quetta, Barkhan and Sibbi); slight excess in 2 meteorological observing stations (Saidu Sharif and Balakot); normal in 12 meteorological observing stations (Garhi Dupatta, Chitral, Drosh, Kakul, Sargodha, Lahore(Air port), Nokkundi, Pasni, Jiwani, Moenjodaro, Karachi(Air port) and Karachi(Masroor); slight deficit in 7 meteorological observing stations (Dir, Peshawar, Risalpur,

Cherat, Mianwali, Lahore(PBO) and Bahawalpur; moderate deficit in 1 meteorological observing station (Kotli) and in large deficit in 24 meteorological observing stations (Parachinar, Kohat, D.I.Khan, Chaklala, Murree, Jhelum, Sialkot, Faisalabad, Shorekot, Multan, Bahawalpur, Khanpur, Dalbandin, Zhob, Kalat, Khuzdar, Panjgur, Jacobabad, Rohri, Nawabshah, Padidan, Hyderabad, Badin and Chhor.

c. Temperature distribution:

Heat wave conditions prevailed on 10 days in Sukkur division, on 1–3 days in Sargodha, Multan, Faisalabad, Bahawalpur, Sibbi, Larkana and Mirpurkhas divisions. Hot day conditions prevailed on 2–4 days in Lahore and Quetta divisions. Day temperatures were appreciably to markedly above normal on 3 – 4 days in Malakand, Rawalpindi, Mekran and Karachi divisions. They were appreciably to markedly below normal on 7–9 days in Peshawar, Rawalpindi, Multan and Zhob divisions, on 4–6 days in FATA, Hazara, Malakand, Gujranwala, Lahore, Bahawalpur, Quetta, Sukkur and Hyderabad divisions, on 2–3 days in Sibbi, Mekran and Larkana divisions. They were considerably below normal on 1–2 days in Malakand, Hazara, D.I.Khan, Rawalpindi, Lahore, Faisalabad, Quetta, Sibbi and Mekran divisions. During the month, the highest maximum temperature in plains of the country was 49.2°C recorded at Jacobabad (Larkana division) on 20 May 2003.

d. Disastrous weather events and damages:

No such major report appeared in the national press during this month.

Table 3: Details of the weather system during May 2003

S. No (1)	System (2)	Period (3)	Place of first location (4)	Direction of movement (5)	Place of final location (6)	Remarks (7)
1	Low pressure	4-5	South Punjab and adjoining areas	Stationary	South Punjab and adj. areas	Became less-marked on 6
2	Do	9-11	NWFP & adjoining Punjab	Eastwards	Kashmir and adjoining areas	Moved away Eastwards on 12
3	Do	11-12	South Punjab & adjoining areas	Southeastwards	North Rajasthan (India)	Moved away Southeastwards on 13
4	Trough of low	12-14	Upper NWFP & adj. areas	Eastwards	Kashmir and adj. areas	Moved away Eastwards on 15
5	Low pressure	17-21	Northeast Balochistan & adj. areas	Stationary	Northeast Balochistan & adj. areas	Became less-marked on 22
6	Do	29-31	Baluchistan & Adjoining areas	Northeastwards	North Punjab & adj. areas	Moved away Northeastwards on 1 June
7	Low pressure associated with an upper air trough extending upto mid-tropospheric level	1-3	North Punjab and adjoining areas	Northeastwards	Kashmir and adjoining areas	Moved away Northeastwards on 4
8	Low pressure associated with an upper air trough extending upto mid-tropospheric level	22-25	Northeast Afghanistan and adjoining areas	Eastwards	Kashmir and adjoining areas	Moved away Eastwards on 26
9	Do	26-28	Upper NWFP and adjoining areas	Do	Do	Moved away Eastwards on 29

2. June

a. Weather and associated synoptic features

Details of weather systems formed during the month are given in Table 4. Rain/thundershowers with a few duststorms in plains occurred almost at all the places on 8–10 days in Hazara and Gujranwala divisions, on 4–6 days in FATA, Malakand, Kohat, Rawalpindi, Lahore and Zhob divisions, on 1 – 2 days in Peshawar, Sargodha, Faisalabad, D.G.Khan, Bahawalpur, Hyderabad and Karachi divisions. Rain/thunderstorms with duststorms in plains also occurred at a few places on 6–9 days in FATA, Malakand and Rawalpindi divisions, on 1–3 days in Hazara, Kohat, Gujranwala, Sargodha, Faisalabad, Lahore, Bahawalpur, Zhob, Sibbi, Kalat, Sukkur, Hyderabad and Mirpurkhas divisions.

b. Rainfall distribution:

The rainfall was in large excess in 12 meteorological observing stations (Gupis, Chitral, Drosh, Saidu Sharif, Kohat, Jhelum, Lahore (air port), Bahawalnagar, Khanpur, Barkhan, Badin and Karachi (air port)); moderate excess in 5 meteorological observing stations (Bunji, Kakul, Balakot, Shorekot and Bahawalnagar); slight excess in 3 meteorological observing stations (Gilgit, Peshawar and Lahore (PBO)); normal in 8 meteorological observing stations (Muzaffarabad, Kotli, Chaklala, Sialkot, Nokkundi, Pasni, Moenjodaro and Hyderabad); slight deficit in 4 meteorological observing stations (Astor, Garhi Dupatta, Murree and Sargodha); moderate deficit in 4 meteorological observing stations (Chilas, Dir, Mianwali and Karachi (Masroor)) and in large deficit in 20 meteorological observing stations (Skardu, Parachinar, Risalpur, Cherat, D.I.Khan, Faisalabad, Multan, Quetta, Dalbandin, Zhob, Sibbi, Kalat, Khuzdar, Panjgur, Jiwani, Jacobabad, Rohri, Nawabshah, Padidan and Chhor).

c. Temperature distribution:

Severe heat wave conditions prevailed on 1 day in Sibbi division. Heat wave conditions prevailed on 9–12 days in Sukkur and Larkana divisions, on 5–6 days in Faisalabad, Sibbi and Peshawar divisions, on 1–3 days in Hyderabad, Gujranwala, Lahore, Multan, Bahawalpur, Sargodha and Zhob divisions. Hot day conditions prevailed on 3–4 days in Quetta and Mekran divisions, on 1 day in Rawalpindi division. Day temperatures were appreciably markedly above normal on 8–11 days in Malakand and Rawalpindi

divisions, on 5–6 days in FATA, Quetta and Mekran divisions, on 1 day in Hazara division. They were appreciably to markedly below normal on 9 days in Rawalpindi and Lahore divisions, on 4–6 days in Hazara, Peshawar and Gujranwala divisions, on 1–3 days in FATA, Malakand, Sargodha, Faisalabad, Multan, Bahawalpur, Quetta, Sibbi, Sukkur, Larkana and Hyderabad divisions. They were considerably below normal on 1 day each in Lahore and Bahawalpur divisions. During the month, the highest maximum temperature in plains of the country was **52.6C°** recorded at Sibbi (Sibbi division) on 5 June 2003.

d. Disastrous weather events and damages:

According to press reports twin cities of Islamabad & Rawalpindi experienced a severe dust storm on 17 June 2003 and Lahore on 29 June 2003. Dust storms caused heavy loss of property in these areas.

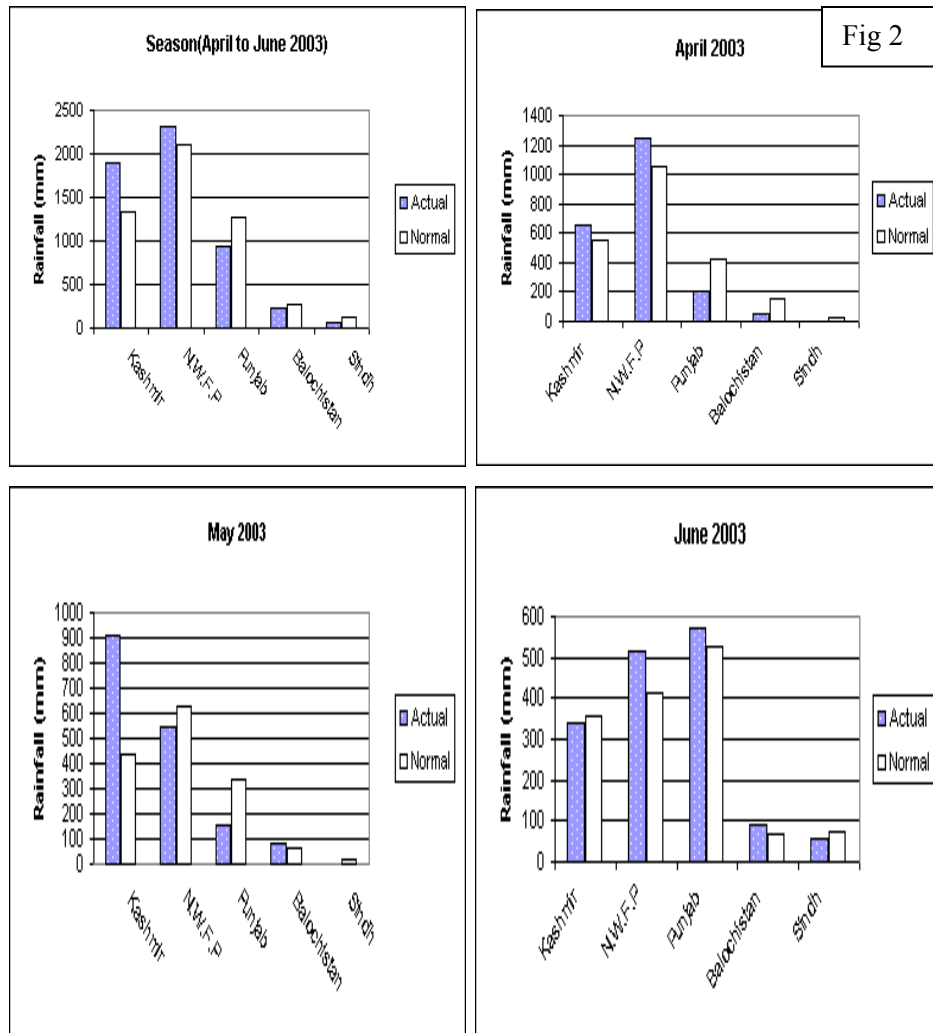
Table 4: Details of weather system during June 2003

S.No (1)	System (2)	Period (3)	Place of first location (4)	Direction of movement (5)	Place of final location (6)	Remarks (7)
1	Low pressure	2-4	Northeast Balochistan and adjoining areas	Northeastwards	North Punjab and adjoining areas	Became less-marked on 5
2	Do	6-9	North Punjab and adjoining areas	Eastwards	Do	Moved away East-wards on 10
3	Do	17-19	Saurashtra & Kutch (India) & adj. areas	North/North-westwards	Southeast and adjoining areas	Became less-marked on 20
4	Low pressure associated with an upper air trough extends upto mid tropospheric level	9-12	Upper NWFP and adjoining Kashmir	Eastwards	Kashmir and adjoining areas	Moved away Eastwards on 13
5	Do	17-18	NWFP and adjoining areas	Do	Do	Moved away East-wards on 19
6	Low pressure	19-24	Do	Do	Do	Became less-marked on 25
7	Do	27-29	Do	Do	Do	Moved away East-wards on 30

Table 5: Principal amounts of rainfall (30 mm and above)

Date	April	May	June
(1)	(2)	(3)	(4)
1	Nil	Malam Jabba 32	Nil
2	Nil	Astor 68, Chilas 68, Bunji 56, Skardu 54, Muzaffarabad 42, Kalam 40 & Gilgit 31	Nil
3	Peshawar 31	Bunji 46, Gilgit 45, Kakul 44, Skardu 41, Chilas 41, Gupis 40 & Balakot 36	Nil
4	Nil	Nil	Nil
5	Nil	Nil	Nil
6	Nil	Nil	Nil
7	Nil	Nil	Nil
8	Nil	Nil	Nil
9	Nil	Nil	Kotli 36, Saidu Sharif 35 & Malam Jabba 30
10	Nil	Nil	Nil
11	Nil	Nil	Nil
12	Nil	Nil	Kakul 39 & Garhi Dupatta 33
13	Nil	Nil	Nil
14	Garhi Dupatta 32	Nil	Nil
15	Nil	Nil	Nil
16	Balakot 57, Kalam 48, Dir 48, Murree 39, Peshawar 38, Garhi Dupatta 36, Malam Jabba 36, Muzaffar-abad 35 & Kakul 34	Nil	Nil
17	Nil	Nil	Nil
18	Kamra 60	Nil	Gupis 37, Bahawalpur 37 & Rahim Yar Khan 37

Date	April	May	June
(1)	(2)	(3)	(4)
19	Malam Jabba 78, Dir 67, Saidu Sharif 50, Kalam 50, Chitral 38, Parachinar 32 & Muzaffarabad 31	Nil	Nil
20	Peshawar 55, Kohat 40, Risalpur 39, Kakul 38, Balakot 36 & Cherat 32	Nil	Nil
21	Nil	Nil	Nil
22	Nil	Nil	Nil
23	Nil	Nil	Nil
24	Nil	Nil	Barkhan 37
25	Drosh 45 & Chitral 31	Barkhan 36	Nil
26	Kalam 54	Malam Jabba 30	Mandi Bahauddin 62
27	Nil	Nil	Balakot 54
28	Nil	Muzaffarabad 31	Islamabad 30 & Jhelum 30
29	Nil	Nil	Mandi Bahauddin 40
30	Nil	Nil	Nil
31	Nil	Nil	Nil



Appendix

Definition of the terms given in '*Italics*'

Rainfall		Temperature	
<i>Large excess</i>	Percentage departure from normal rainfall is +51% or more.	<i>Severe Heat Wave</i>	Departure of maximum temperature from normal is +8°C or more for the regions where normal max temperature is more than 40°C declared only when the max temperature of a station reaches at least 40°C for plains and at least 35°C for Hilly regions.
<i>Moderate excess</i>	Percentage departure from normal rainfall is +26% to +50%.		
<i>Slight excess</i>	Percentage departure from normal rainfall is +11% to +25%.		
<i>Normal</i>	Percentage departure from normal rainfall is -10% to +10%.	<i>Heat Wave Conditions (appreciable + moderate)</i>	Departure of max temperature from normal is between +4°C to +7°C where the normal max temperature is more than 40°C.
<i>Slight deficit</i>	Percentage departure from normal rainfall is -11% to -25%.		
<i>Moderate deficit</i>	Percentage departure from normal rainfall is -26% to -50%.		
<i>Large deficit</i>	Percentage departure from normal rainfall is -51% or less.	<i>Hot Dry Conditions</i>	Whenever the max temperature remains 40°C or more and minimum remains 5°C or more above normal, provided, it is not satisfying the heat wave criteria.
<i>Almost at all places</i>	66% or more stations of a meteorological division reporting at least 2.5 mm rainfall.	<i>Markedly above normal</i>	Departure of max Temperature from normal is between +6° C to +7° C.
<i>At a number of places</i>	33 % to 66 % stations of a meteorological division reporting at least 2.5 mm rainfall.	<i>Appreciably above normal</i>	Departure of max temperature from above normal is between +4° C to +5° C.
<i>At a few places</i>	33 % or less stations of a meteorological division reporting at least 2.5 mm rainfall.	<i>Appreciably Below Normal</i>	Departure of max temperature from below normal is between -4° C to -5° C.
<i>Isolated places</i>	One or two stations of a meteorological division.	<i>Markedly Below Normal</i>	Departure of max temperature from normal is between -6° C to -7° C.
<i>Heavy rainfall</i>	rainfall amount is from 44.5 mm to 88.9 mm in 24 hour	<i>Considerably Below Normal</i>	Departure of max temperature from normal is -8° C or less.
<i>Very heavy rainfall</i>	Rainfall amount is 89.0 mm or more in 24 hours.		